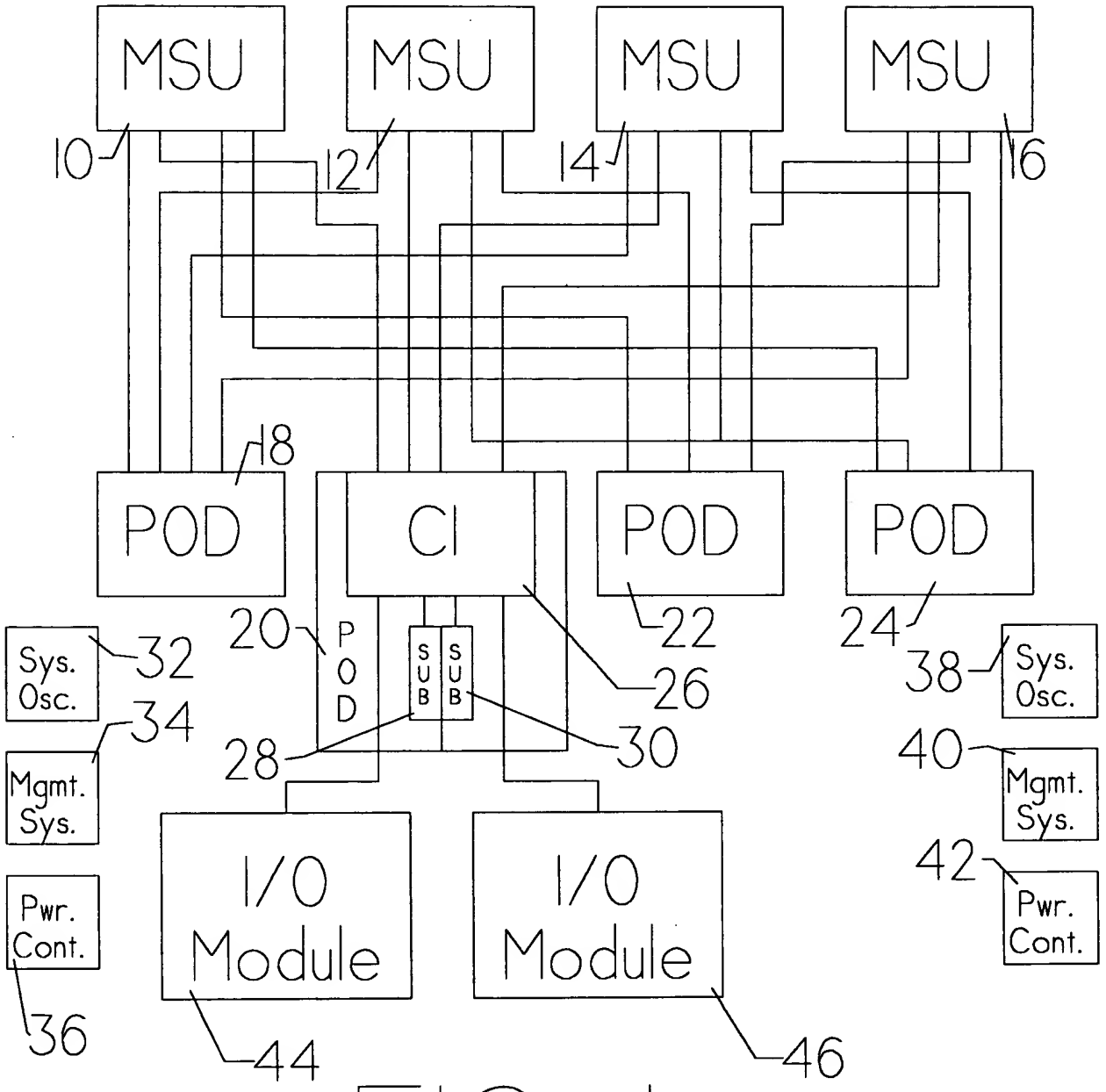
MSU
MSU
MSU
MSU
10
12
14
16
18
POD
CI
POD
POD
20
POD
SUB
SUB
22
24
26
28
30
Sys. Osc.
32
34
Mgmt. Sys.
Pwr. Cont.
36
I/O Module
I/O Module
44
46
38
Sys. Osc.
40
Mgmt. Sys.
42
Pwr. Cont.

FIG. 1

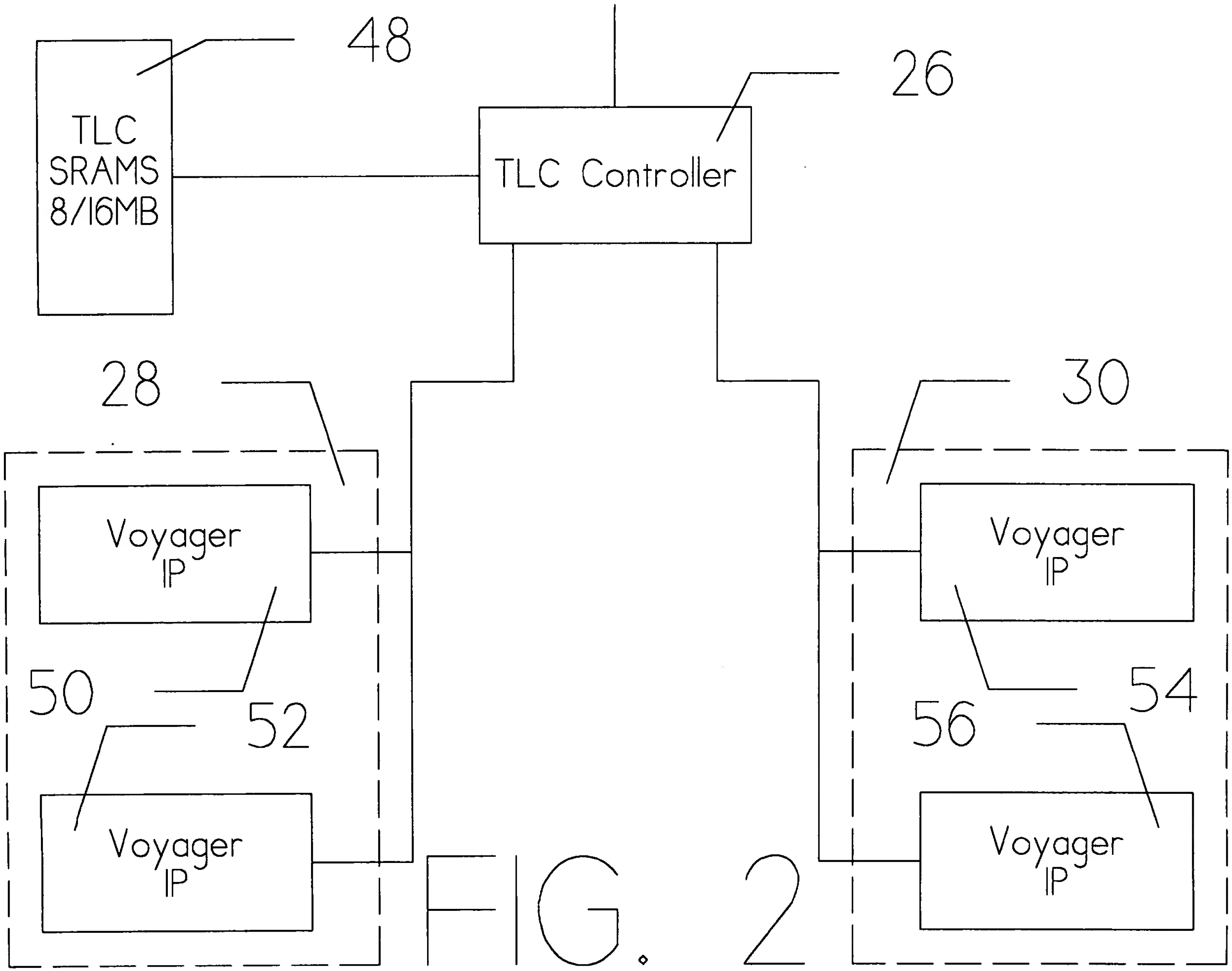
TLC
SRAMS
8/16MB
48
TLC Controller
26
28
30
Voyager
IP
Voyager
IP
Voyager
IP
Voyager
IP
50
52
54
56

FIG. 2

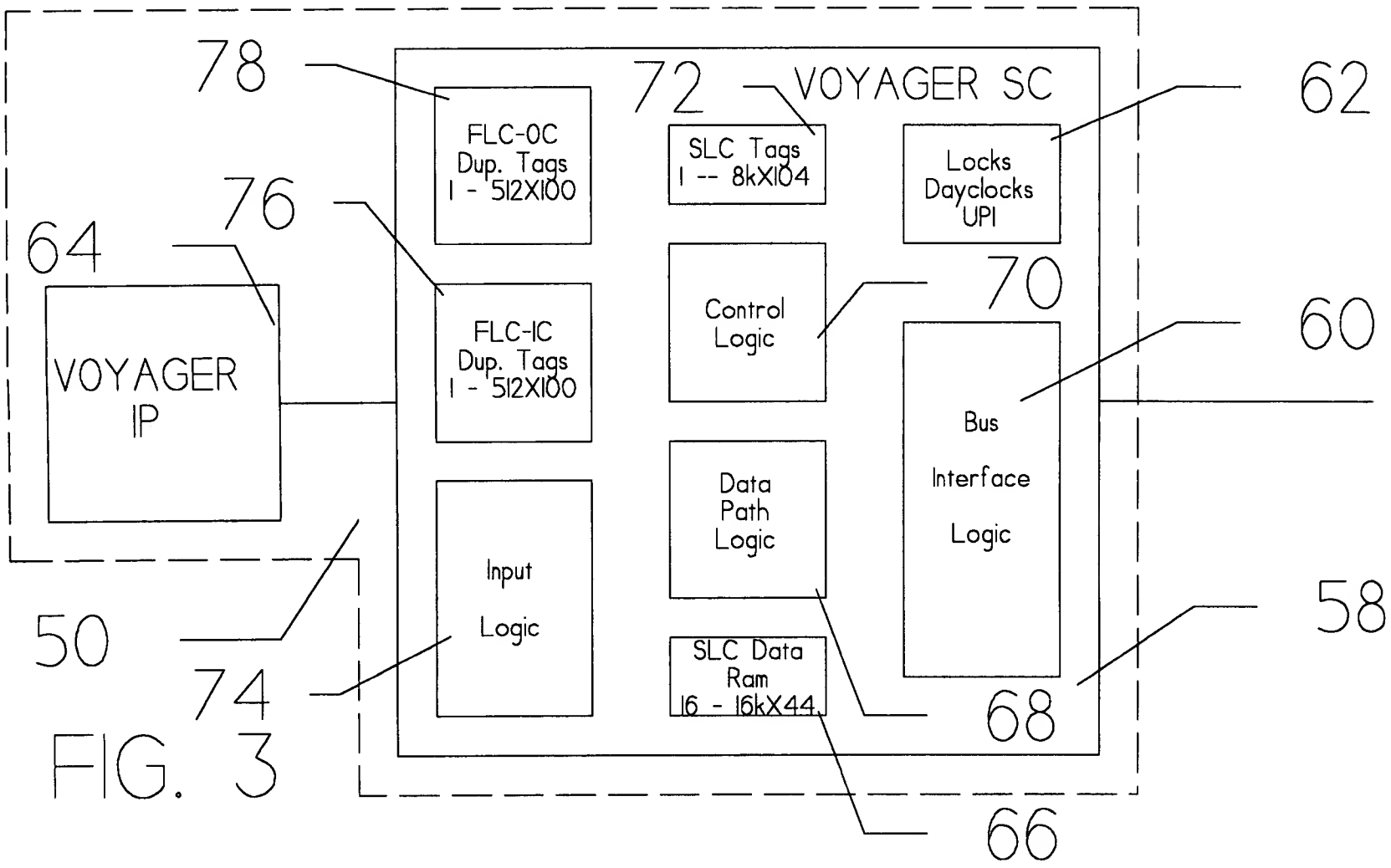
78
72
VOYAGER SC
62
FLC-0C
Dup. Tags
1 - 512X100
SLC Tags
1 -- 8kX104
Locks
Dayclocks
UPI
76
64
70
Control
Logic
60
VOYAGER
IP
FLC-IC
Dup. Tags
1 - 512X100
Bus
Interface
Logic
Data
Path
Logic
Input
Logic
58
50
74
SLC Data
Ram
16 - 16kX44
68
66

FIG. 3

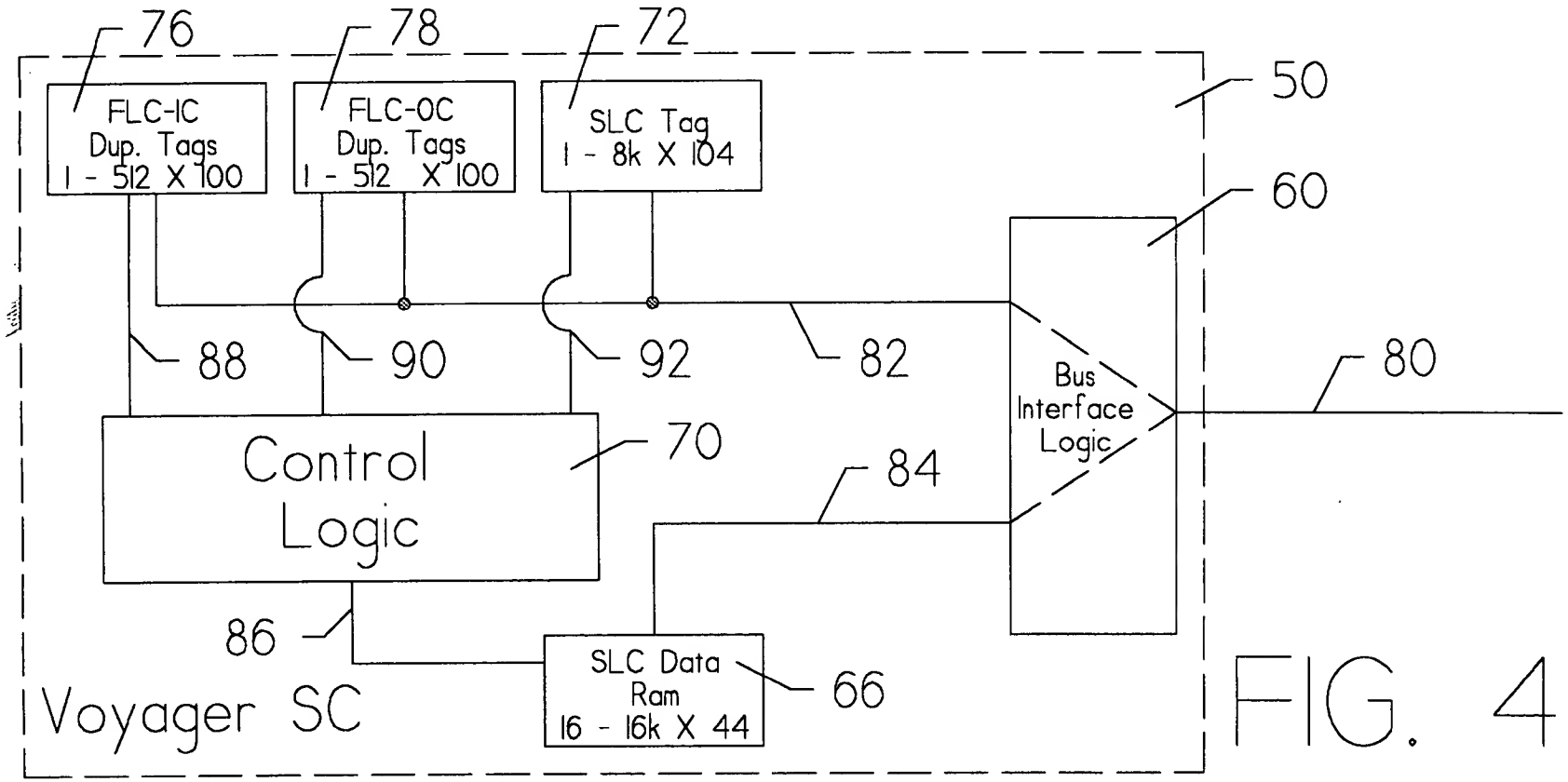
76
78
72
50
FLC-IC
Dup. Tags
1 - 512 X 100
FLC-OC
Dup. Tags
1 - 512 X 100
SLC Tag
1 - 8k X 104
60
88
90
92
82
80
Bus
Interface
Logic
Control
Logic
70
84
86
SLC Data
Ram
16 - 16k X 44
66
Voyager SC

FIG. 4

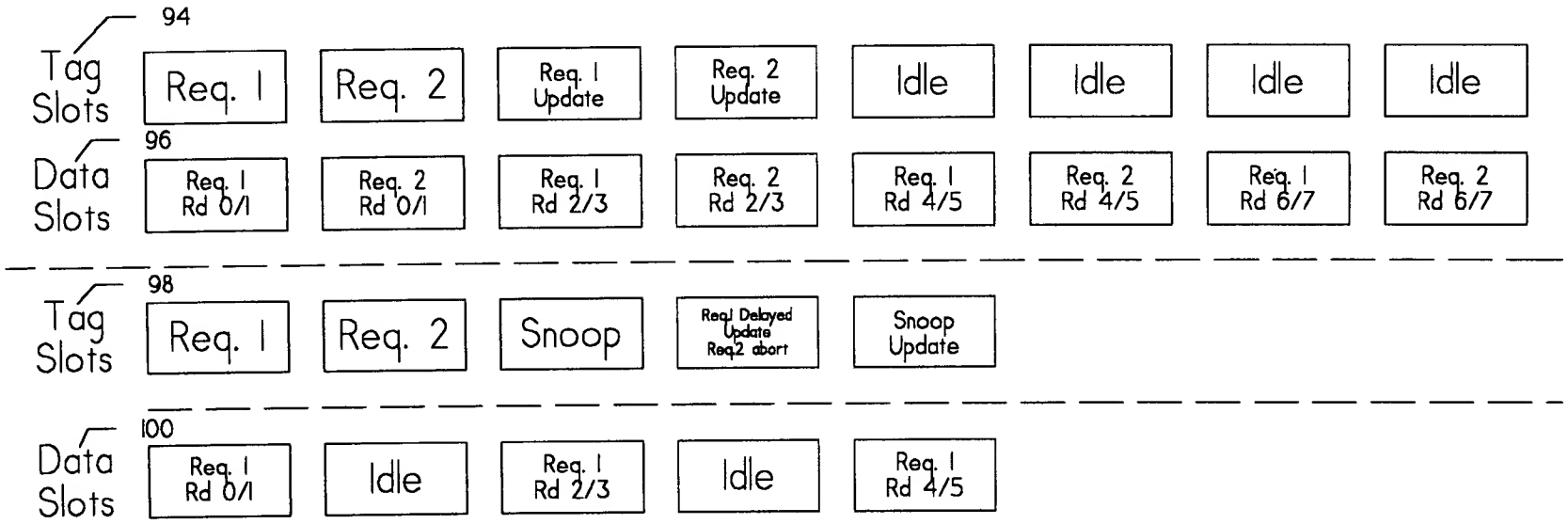
94
Tag Slots
Req. 1
Req. 2
Req. 1 Update
Req. 2 Update
Idle
Idle
Idle
Idle
96
Data Slots
Req. 1 Rd 0/1
Req. 2 Rd 0/1
Req. 1 Rd 2/3
Req. 2 Rd 2/3
Req. 1 Rd 4/5
Req. 2 Rd 4/5
Req. 1 Rd 6/7
Req. 2 Rd 6/7
98
Tag Slots
Req. 1
Req. 2
Snoop
Req1 Delayed Update Req2 abort
Snoop Update
100
Data Slots
Req. 1 Rd 0/1
Idle
Req. 1 Rd 2/3
Idle
Req. 1 Rd 4/5

FIG. 5